SONY

3-751-550-**21**(1)

Compact Hi-Fi Stereo System

Operating Instructions

COMPACT disc DIGITAL AUDIO

LBT-V102
LBT-V402CD

© 1990 by Sony Corporation

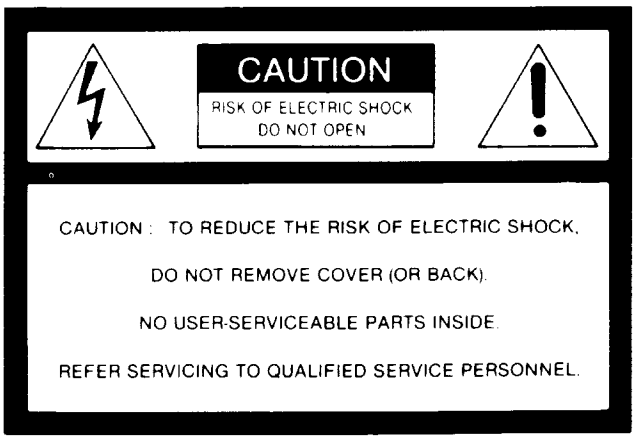
Owner's Record

The model and serial numbers are located at the rear of each model. Record them in the spaces provided below. Refer to these numbers whenever you call upon your Sony dealer regarding this product.

Model No. _____ Serial No. _____

WARNING

To prevent fire or shock hazard, do not expose the unti to rain or moisture.


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

*The graphical symbols are on the rear enclosure.

Note to CATV system installer
This reminder is provided to call the CATV system installer's attention to Article 820-22 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

Safety Precautions

- Operate the unit only on 120 V AC, 60 Hz.
- Unplug the unit from the wall outlet if it is not to be used for an extended period of time. To disconnect the cord, pull it out by grasping the plug. Never pull the cord itself.
- The nameplate indicating operating voltage, power consumption, etc. is located at the rear.
- Should any solid object or liquid fall into the unit, unplug the unit and have it checked by qualified personnel before any further operation.

If you have any questions or problems concerning your unit, please consult your nearest Sony dealer.

For detailed precautions, see the leaflet "IMPORTANT SAFEGUARDS".

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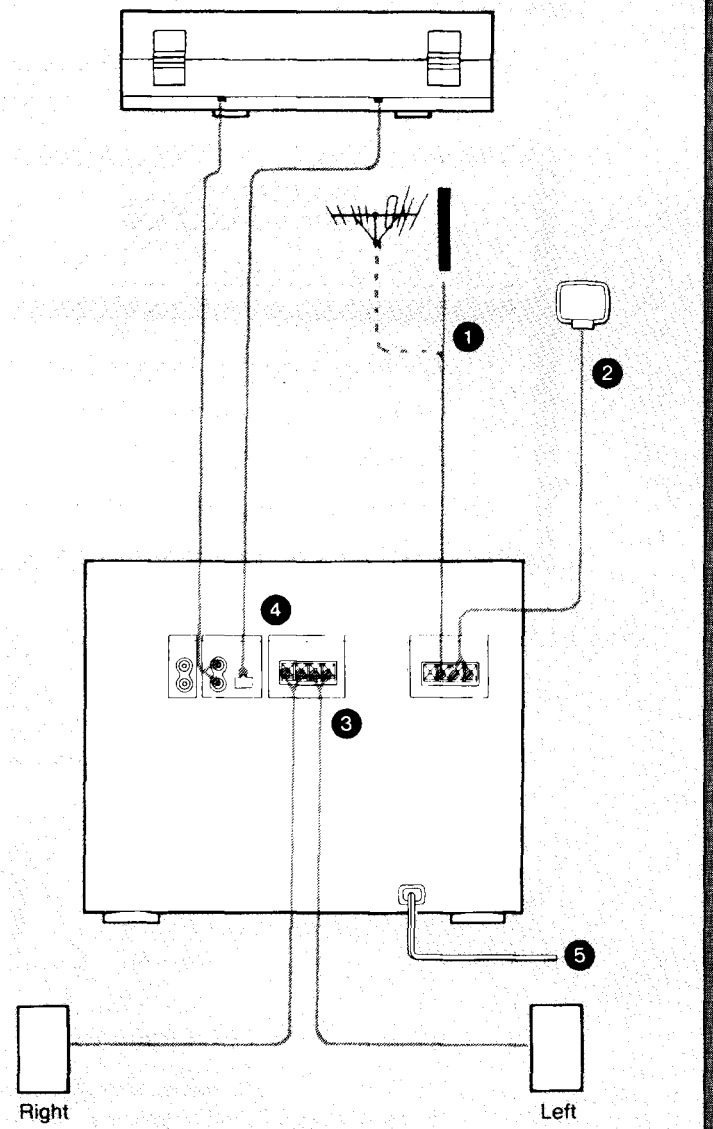
Introduction

This manual covers the systems in the chart below.
The number of your system is shown on the carton.
Please disregard any instructions which do not apply to your system.

System number / Component	LBT-V102	LBT-V402CD
Stereo deck receiver	HST-V102	
Turntable	PS-LX43P	
CD player		CDP-M19
Speakers	SS-D201	

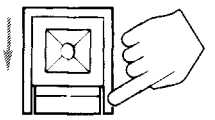
For instructions on the CD player, please refer to the manual supplied with it.

Installation

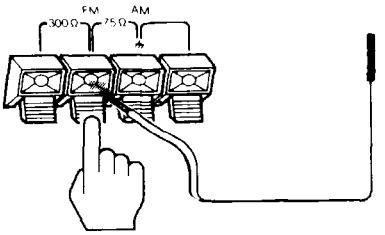


How to attach a wire to the terminal

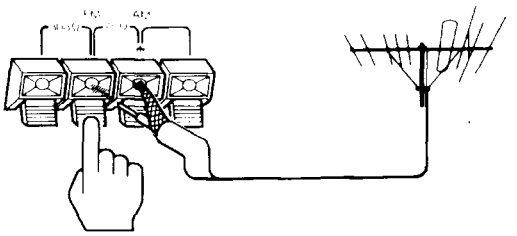
1 **Press down.**



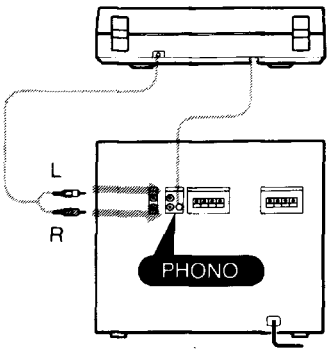
1 **FM antenna**



For better FM reception, connect to an outdoor antenna.



4 Turntable



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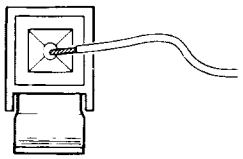
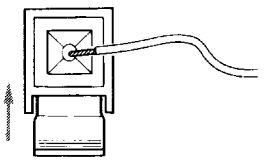
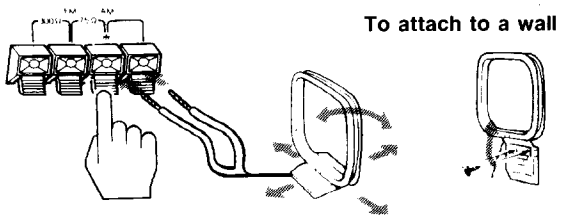


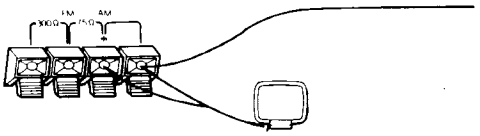
3 Push up.



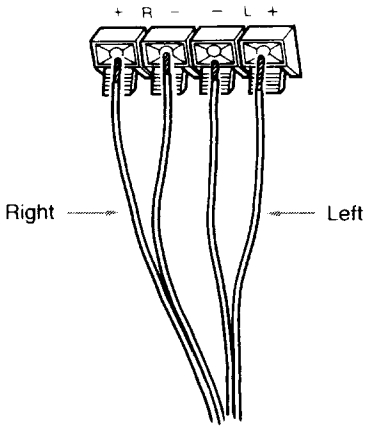
2 AM loop antenna



For better AM reception, connect a 6 to 15-meter insulated wire.



3 Speaker cords



5 Connect the AC power cord to a wall outlet.

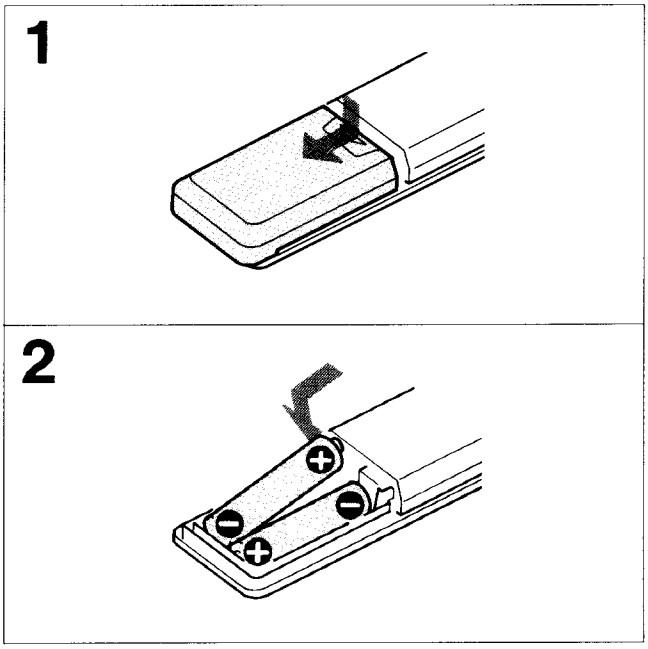
Optional equipment

You can connect a CD player (Sony CDP-M19) to the CD IN jacks.

Installation

Remote Commander

Insert two R6 (size AA) batteries with correct polarity.



Battery life
About half a year of normal operation can be expected when using the Sony SUM-3 (NS) batteries.
When the batteries are exhausted, the commander can no longer operate the unit. Replace both batteries with new ones.

To avoid battery leakage
When the commander is not to be used for a long period of time, remove the batteries to avoid damage caused by battery leakage and corrosion.

To avoid malfunction of the remote commander
Avoid keeping the commander under extremely hot or humid locations.

Adjusting the Sound

The following operations apply only to reproduced sound.

Adjusting the Volume

To increase the volume, turn the VOLUME control clockwise.
To decrease it, turn the control counterclockwise.
- Turn down the volume before switching on the unit. This prevents damage to speakers.

Adjusting the Sound Quality

Adjust the following GRAPHIC EQUALIZER controls.
100 Hz: Boosts or cuts heavy bass.
330 Hz: Adjusts the power, spaciousness and warmth of the sound.
1 kHz: Accentuates or dims vocals.
3.3 kHz: Boosts to a brighter sound or reduces stridency.
10 kHz: Adjusts tape hiss noise.

Reinforcing the Bass

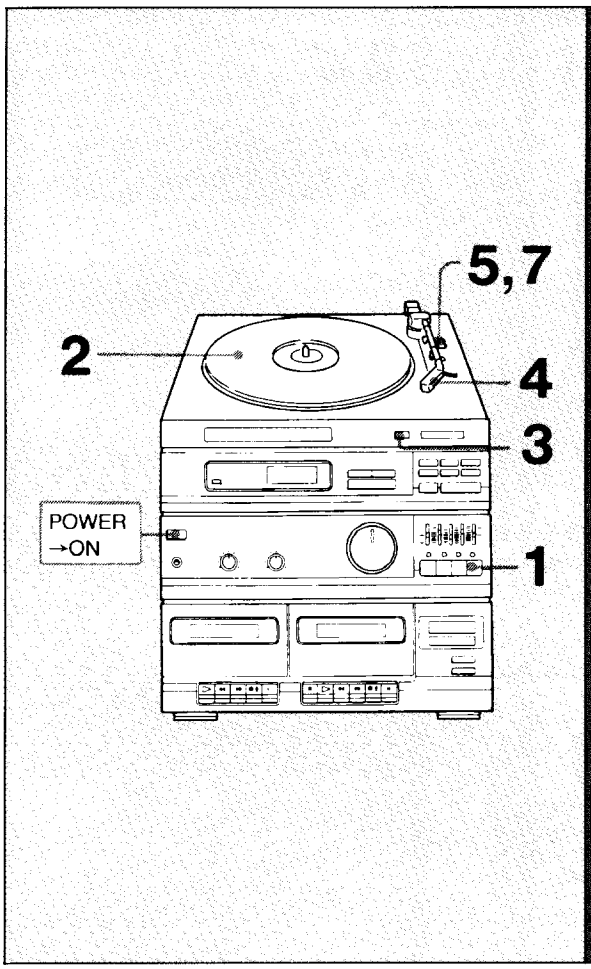
Adjust the DYNAMIC BASS control.
The lower the volume is, the more the bass is emphasized.

Enjoying the Surround Effect

Adjust the SURROUND SOUND control.
- The surround effect does not function when the sound source is monaural.

For private listening
Connect a pair of headphones to the HEADPHONES jack.

Playing Records



1 Press the PHONO button.

2 Place a record on the turntable.

3 Select the speed with the speed selector.

4 Remove the cover from the cartridge, and release the tonearm from its armrest.

5 Set the cueing lever to ▼.

6 Move the tonearm by hand to the desired point on the record.

7 Set the cueing lever to ▼.

When the record is played to the end, the tonearm returns to the armrest and the turntable stops.

To stop during play, press REJECT.

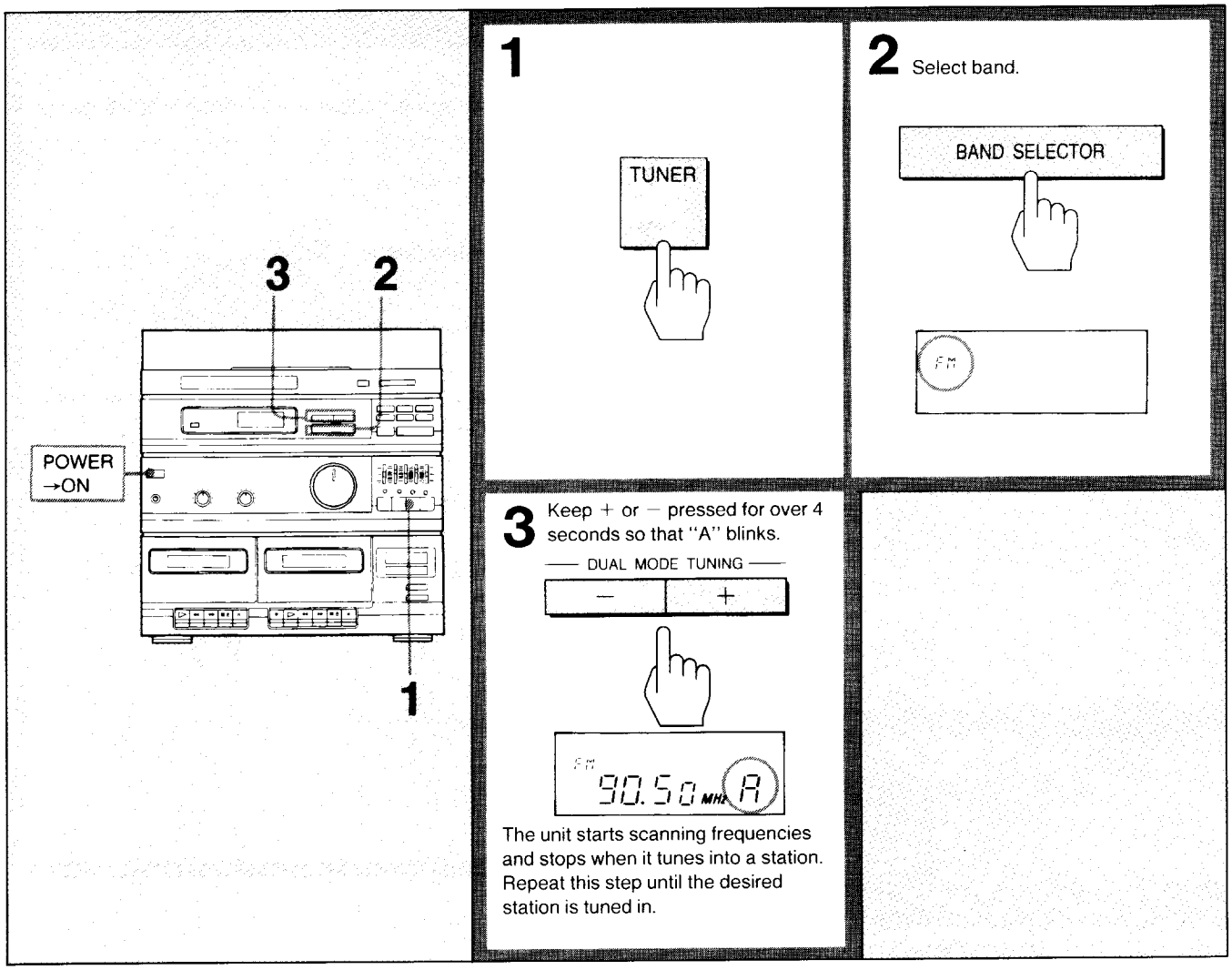
To play a different part of the record
Lift the tonearm by setting the cueing lever to ▼, move the tonearm by hand to the desired point, then set the cueing lever to ▼.

To play a 17-cm record
Use the supplied adaptor.

If the tonearm moves outward when you move it close to the center
Do not resist this movement, as it may damage the automatic return mechanism.

If the tonearm does not return to its armrest
Press REJECT.

Tuning into Radio Stations



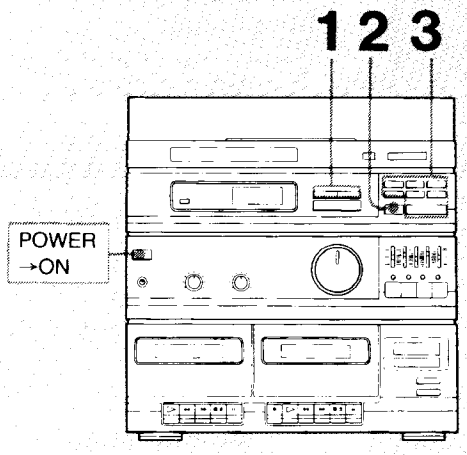
If you cannot tune in a desired station
A station with a weak signal may be skipped. In this case, press + or – again to stop scanning. Then press + or – repeatedly and tune in the exact frequency.

The "TUNED" indication appears
When a station of sufficient signal strength is tuned in.

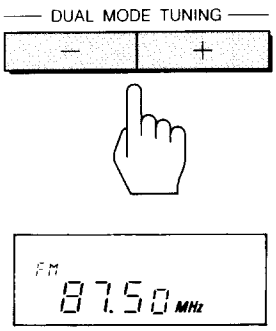
The "STEREO" indication appears
When an FM stereo program of sufficient signal strength is tuned in.

Storing Station Frequencies for Quick Recall

You can store station frequencies in the unit's memory for quick recall later on. Up to 12 frequencies in any band can be stored by specifying a code for each frequency. The code is a combination of an alphabet – A or B – and a numeral – 1 to 6 – :A-1, A-2, ..., B-1, ... B-6.



1 Tune in the desired station.



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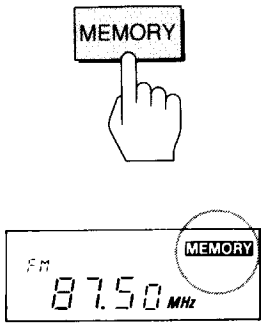
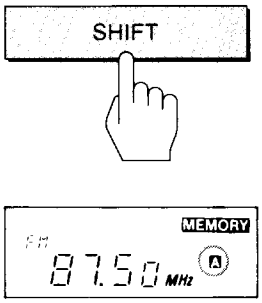
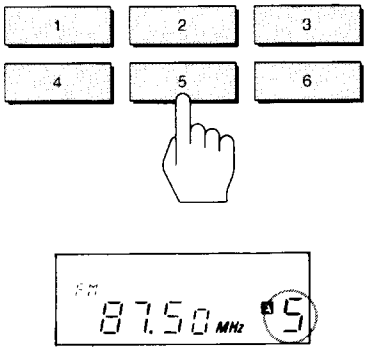


3 Specify a code.

❶ Select alphabet.



❷ Select numeral.



If you cannot store a station successfully

Be sure to press the keys for the code while the "MEMORY" indication is displayed. If the indication has gone off, press MEMORY again.

To erase a stored station

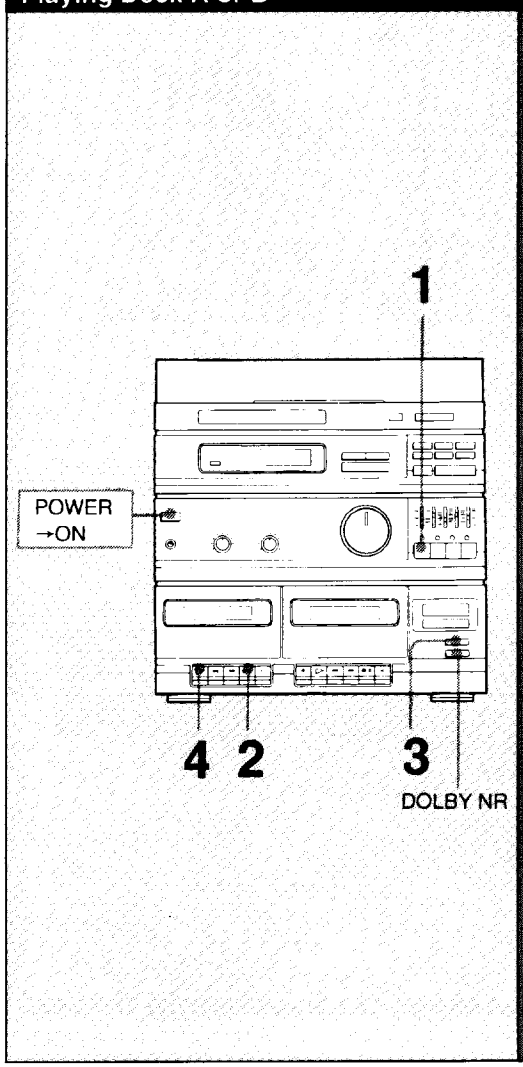
Storing a new station on a used code erases the previously stored one.

Tuning into a Stored Station Directly

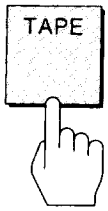
Press SHIFT and a numeric key to specify the code for the desired station.

Playing Back Tapes

Playing Deck A or B



1



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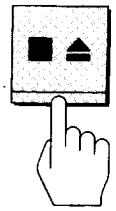
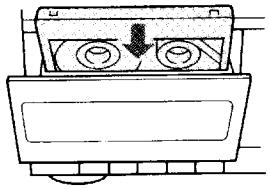
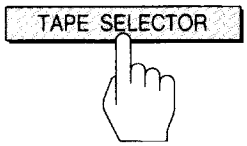


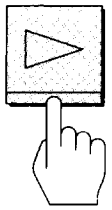


The side facing you is played back.

3 Select tape type.



4



When the tape is played to the end, the deck stops.

To stop during playback, press ■.
To fast forward or rewind, press ▶▶ or ◀◀.
To pause, press ❚❚. To resume, press ❚❚ again.

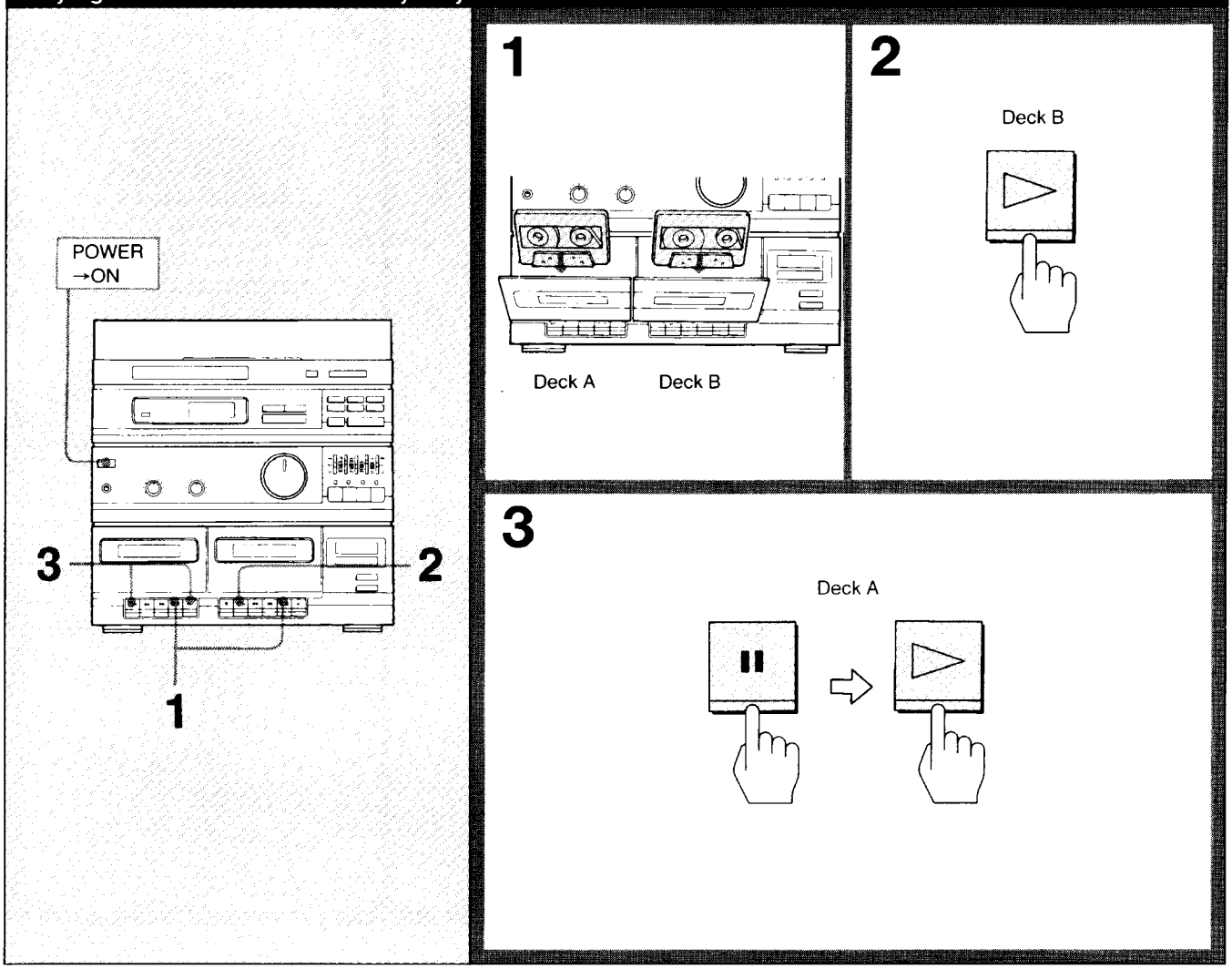
To play a tape recorded with the DOLBY NR* effect
Set DOLBY NR to ON.
The same setting operates on both decks.

To select the tape type
Types I and II can be played back.
Set TAPE SELECTOR to the corresponding position.

When ▶ on both decks are pressed
Only the sound from deck B will be heard.

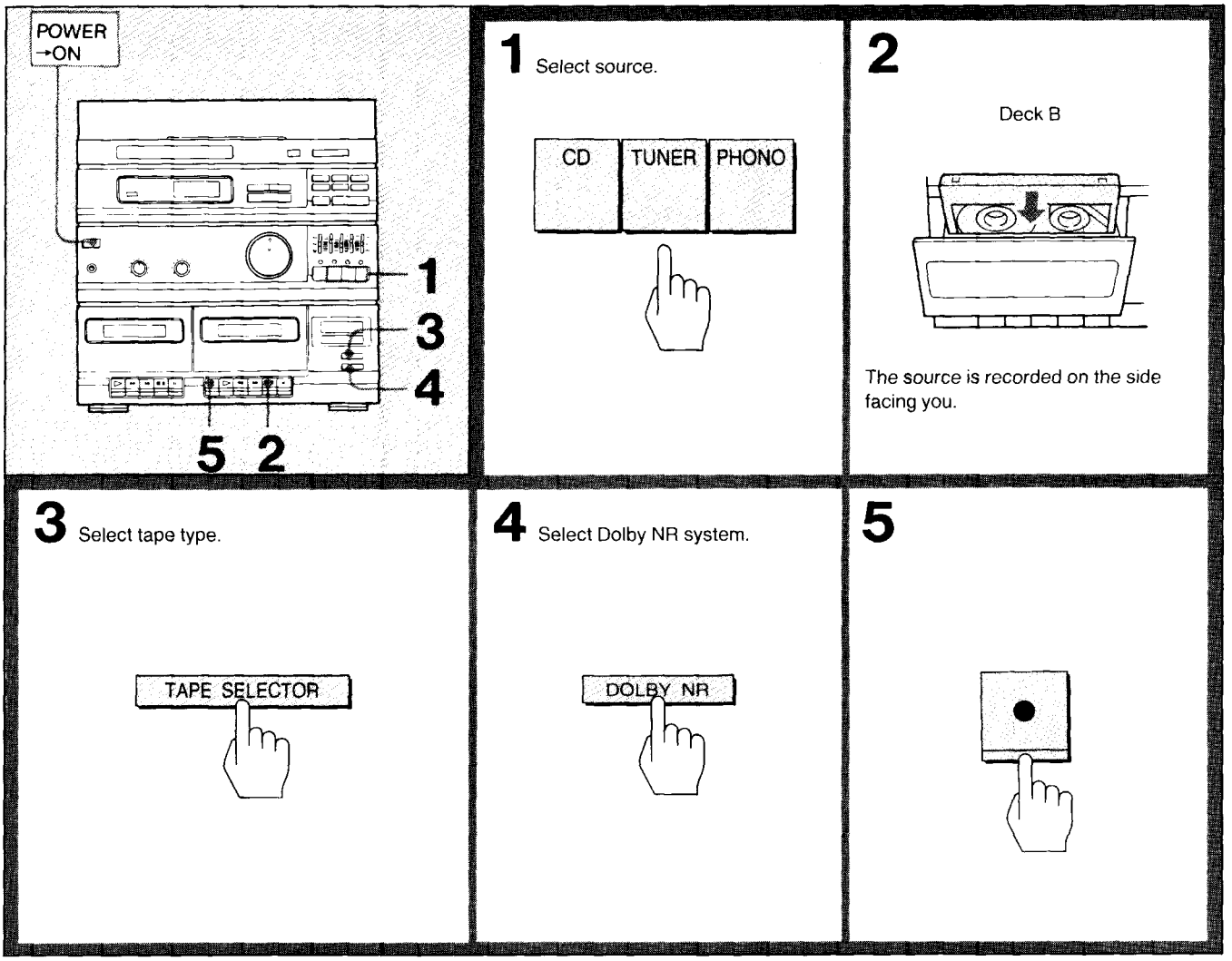
* *Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.*
"DOLBY" and the double-D symbol ⧈ are trademarks of Dolby Laboratories Licensing Corporation.

Playing from Deck to Deck – Relay Play



When the tape in deck B ends, the tape in deck A starts playing.

Recording on Tape



When the tape is recorded to the end, the deck stops.

To stop during recording, press ■.

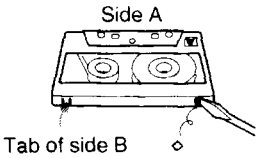
To select the tape type
Types I and II can be used for recording.
Set TAPE SELECTOR to the corresponding position.

To record with the Dolby NR effect
Set Dolby NR to ON.
The Dolby NR(noise reduction) system reduces tape hiss noise in low-level, high-frequency signals by boosting the signals during recording and then lowering them during playback.

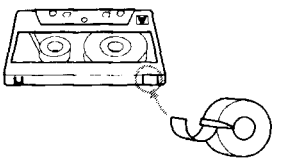
To start recording more precisely
1 After steps 1 to 4 above, press ❚❚.
2 Press ●.
3 Press ❚❚ again to start recording.

Protecting your Recording

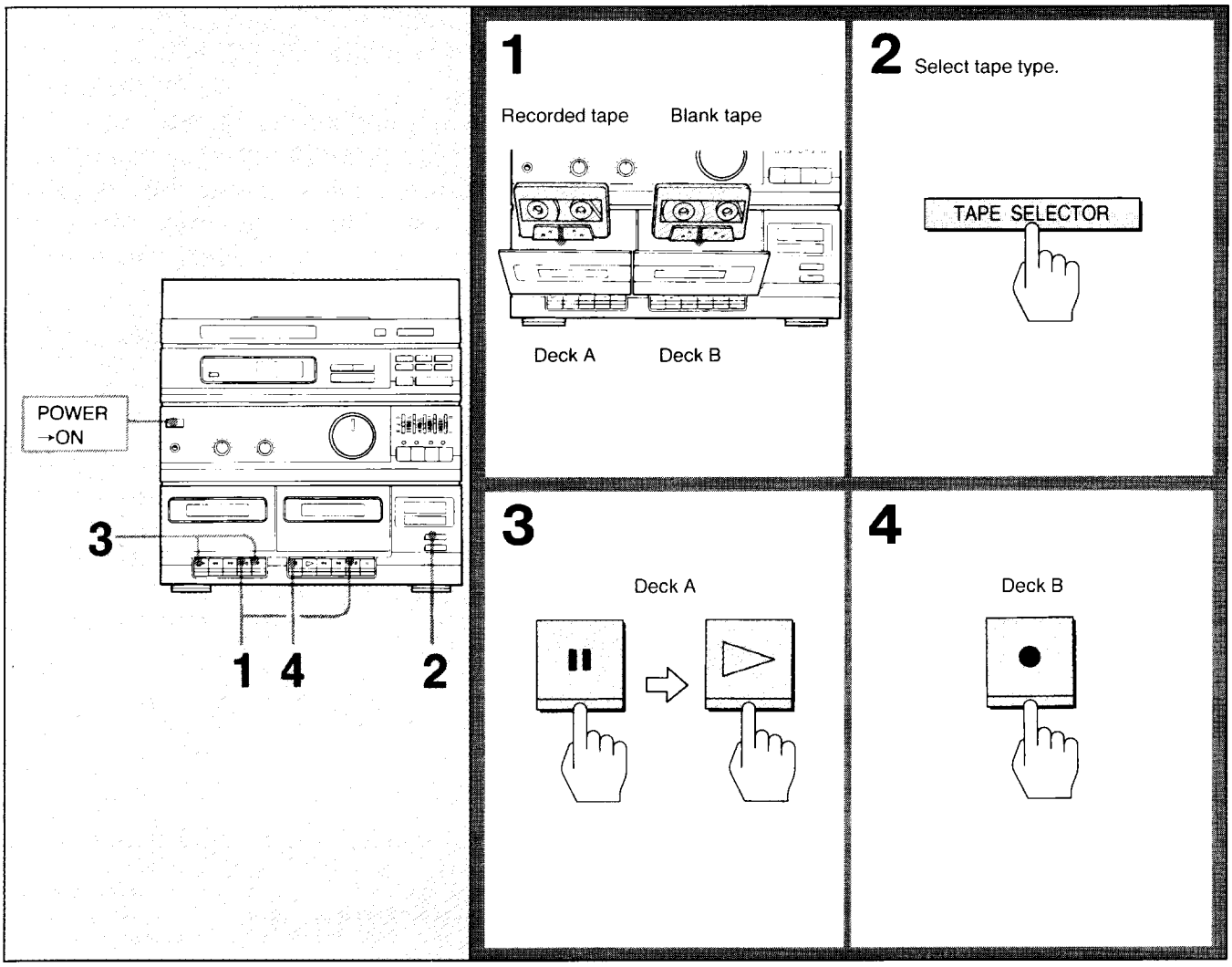
Break out the tab of the side to be protected.
This prevents further recording on that side.



To record on a protected tape, cover the opening with plastic tape.



Dubbing Tapes



To stop dubbing, press ■ on deck A, then press ■ on deck B.

To select the tape type
Types I and II can be used for dubbing.
Set TAPE SELECTOR to the corresponding position.
Be sure to use tapes of the same type for dubbing, as the switch setting is effective on both decks.

You need not designate the Dolby NR system
The tape in deck B is recorded with the same Dolby NR system as the original tape in deck A.

You can listen to other program sources during dubbing.
Select the program source with the function selectors.

Maintenance

Cleaning the Cabinet

Use a soft cloth lightly moistened with a mild detergent solution.

Replacing the Stylus

Replace the stylus after every 400 hours of use.
Turn off the power before replacing the stylus. Handle the stylus with care.

Demagnetizing the Heads

Remove magnetism built up on the head after every 20 to 30 hours of use.
Turn off the power before demagnetizing the heads. Use any commercially available demagnetizer.

Cleaning Heads and Tape Path

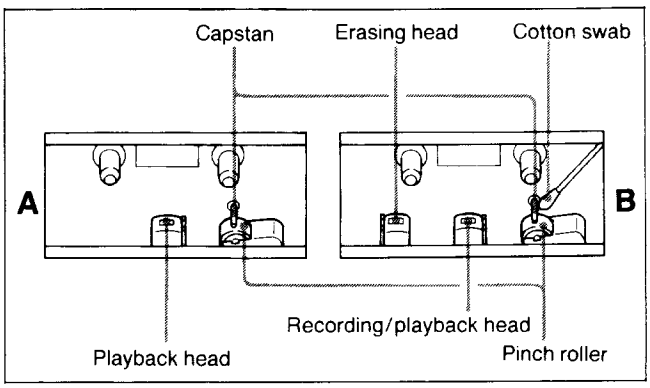
Clean after every 10 hours of use and before recording.

1 Press ⏏ to open the cassette holder.

2 Moisten a cotton tip slightly with cleaning fluid or alcohol.

3 Wipe heads, pinch roller and capstans.

Do not insert a cassette until cleaned areas are completely dry.



Specifications

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION:

With 6 ohm loads both channels driven, from 40 – 20,000 Hz; rated 12 watts per channel minimum RMS power, with no more than 0.5% total harmonic distortion from 250 millwatts to rated output.

Tuner

System	FM stereo FM/AM superheterodyne tuner
FM tuner section	
Tuning range	87.5 to 108 MHz
Antenna	75 ohms unbalanced 300 ohms balanced
Intermediate frequency	10.7 MHz
AM tuner section	
Tuning range	530 to 1,710 kHz
Antenna	AM loop antenna External antenna terminal
Intermediate frequency	450 kHz

Amplifier

Input	Jack type	Sensitivity	Impedance
PHONO IN	Phono	2 mV	47 kohms
CD IN	Phono	200 mV	47 kohms

Frequency response CD: 15 Hz to 50 kHz ±3 dB

Cassette deck

Recording system	4-track 2-channel stereo
Frequency response	DOLBY NR OFF With Type II cassette (Sony UX-S) 40 Hz to 14 kHz (±3 dB) With Type I cassette (Sony HF-S) 40 Hz to 13 kHz (±3 dB)
Wow and flutter	0.12% (WRMS)

Turntable

Platter	30 cm (12 inches)
Tonearm type	Dynamically balanced
Cartridge type	Moving magnet type
Stylus	Sony ND-155G (0.6 mil diamond)
Weight	Approx. 2.1 kg (4 lb 6 oz)
Dimensions	Approx. 355 × 94 × 341 (14 × $3^{11}/_{16}$ × $13^{7}/_{16}$ inches) (w/h/d, including projections)

Speaker system

Speaker system	3-way speaker system
Weight	Approx. 4.3 kg (9 lb 4 oz), per speaker
Dimensions	Approx. 260 × 430 × 175 mm ($10^{1}/_{4}$ × $18^{1}/_{2}$ × $6^{7}/_{8}$) (w/h/d)

General

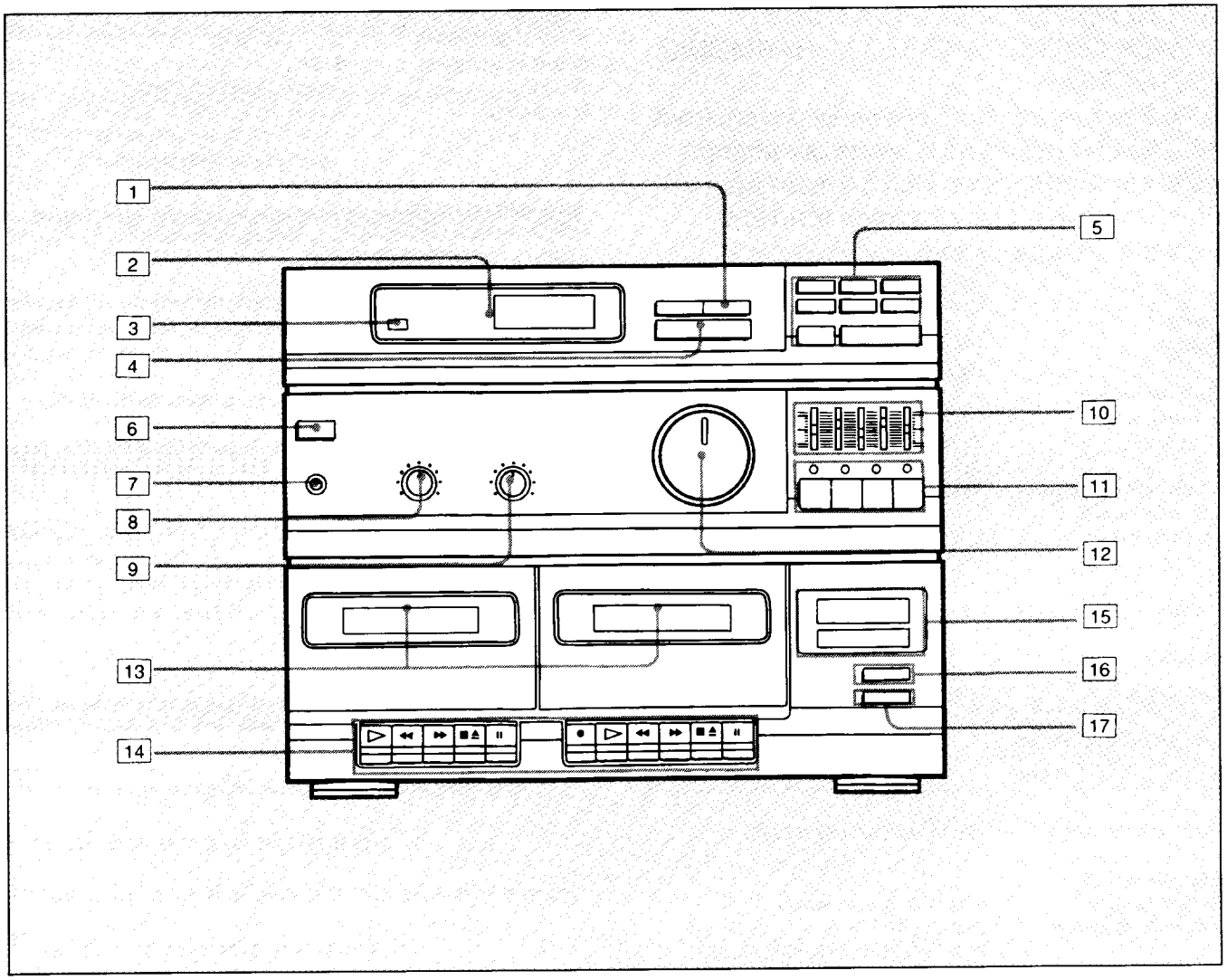
Power requirements	120 V AC, 60 Hz
Power consumption	60 W
Weight	Approx. 6 kg (13 lb 2 oz)
Dimensions	Approx. 355 × 290 × 325 mm (14 × $11^{7}/_{16}$ × $12^{7}/_{8}$ inches) (w/h/d, including projections)

Supplied accessories

Remote commander (1)
Batteries Sony SUM-3 (NS) (2)
FM wire antenna (1)
AM loop antenna (1)
45-rpm adaptor

Design and specifications subject to change without notice.

Location of Controls



Tuner

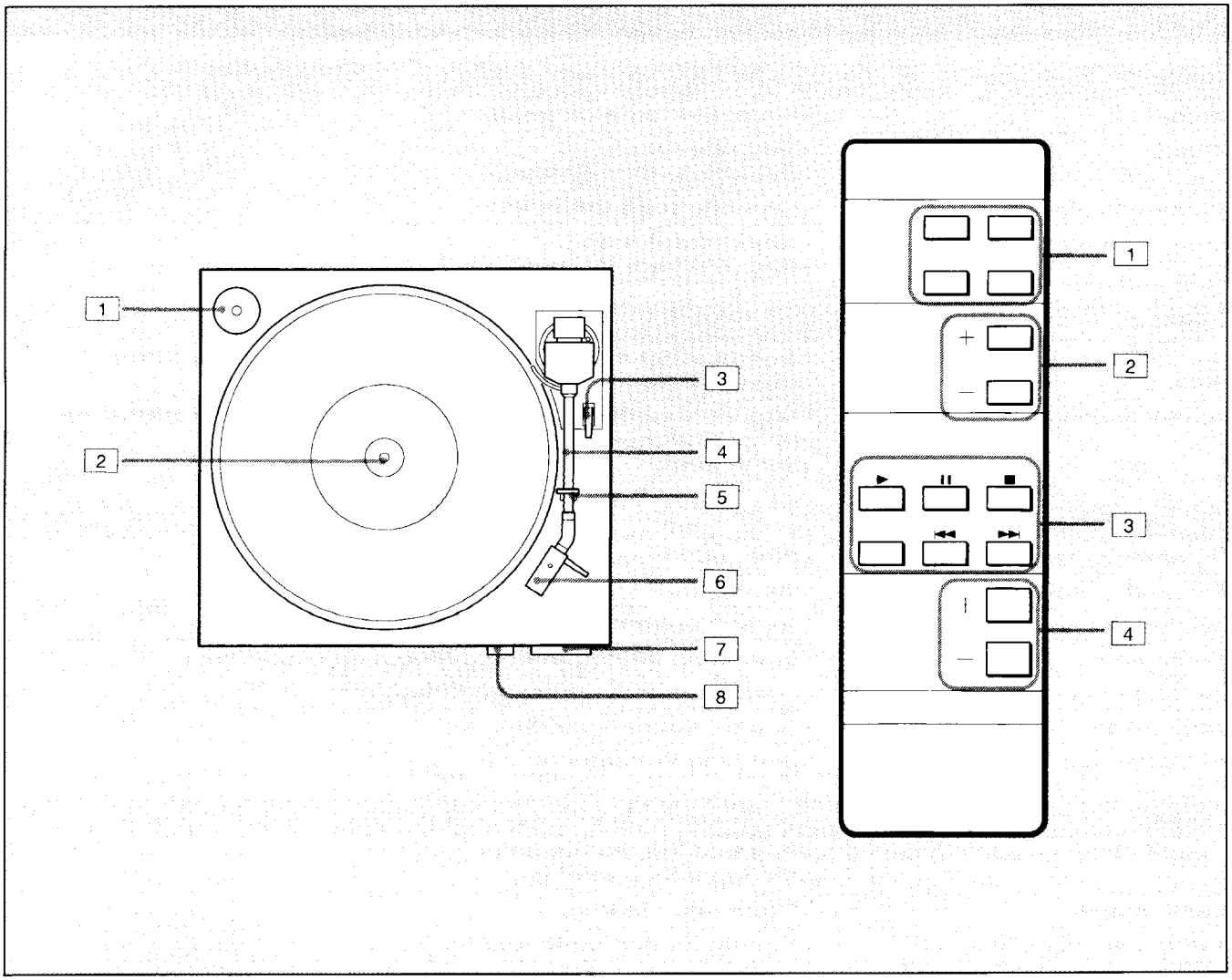
1 TUNING buttons
2 Band/frequency display
3 Remote sensor
4 BAND SELECTOR
5 Buttons for storing station frequencies

Amplifier

6 POWER switch
7 HEADPHONES jack
8 SURROUND SOUND control
9 DYNAMIC BASS control
10 GRAPHIC EQUALIZER controls
11 Function selectors and indicators
12 VOLUME control

Cassette deck

13 Cassette holders
14 Tape operation buttons
◀◀ Leftward fast winding
▶▶ Rightward fast winding
▶ Forward play
■⏏ Stop/eject
❚❚ Pause
● Record
15 OPERATING INDICATOR
16 TAPE SELECTOR
17 DOLBY NR (noise reduction) switch



Turntable

1 45-rpm adaptor
2 Center spindle
3 Cueing lever
4 Tonearm
5 Armrest
6 Cartridge
7 REJECT button
8 Speed selector

Remote commander

1 Function selectors
2 PRESET buttons
Scans stations stored in the unit.
3 CD player operation buttons
Operates an optional Sony CD player equipped with the same functions.
4 VOLUME buttons

Troubleshooting Guide

Symptom	Cause and remedy
General	
No power.	• Connect the AC power cord securely.
No audio.	• Turn up the volume. • Connect the speaker cords securely.
Reversed left and right sound.	• Connect the speaker cords correctly.
Severe hum or noise.	• Make connections securely. • Move TV/VTR away from the unit.
Tuner	
The "TUNED" or "STEREO" indication blinks.	• Adjust the location and direction of the antenna. Connect to an external antenna if the indication still blinks.
Severe hum or noise.	• Adjust the location and direction of the antenna. Connect to an external antenna if hum or noise still interferes with reception. • Turn off CD player, if connected.
Cassette deck	
You cannot play back a tape.	• Press the ▮▮ button to release the unit from the pause mode.
You cannot record on a tape.	• The tab has been removed from the cassette.
You cannot dub tapes.	• The tab of the cassette in deck B has been removed.
Unbalanced tone in higher frequencies.	• Set the DOLBY NR switch to the same position as was set for recording.
Unclear recording or playback.	• Clean and demagnetize the recording/playback head.
Excessive wow or flutter, or sound dropout.	• Clean the capstan and pinch roller.
Incomplete erasure.	• Demagnetize the erasing head.
Turntable	
Tonearm skips, skates or does not advance.	• Place the turntable on a level surface. • The record is dirty or scratched.
Poor sound quality.	• Clean or replace the stylus.
Rumble or low frequency howl.	• Move speakers away from the turntable.
The tonearm does not return to its armrest.	• Set the cueing lever to ▼ and then press the tonearm lightly inward.
Remote commander	
The remote commander does not function.	• Remove any obstruction between the remote commander and the remote sensor on the unit. • The remote commander is being used beyong its operating range. • Replace the batteries in the remote commander.